

the data obtained, *B. vagans*, *B. melanopygus* and *P. insularis* would seem to have the greatest depth of range.

Rearranged on the basis of their vertical distribution, the species listed appear to fall into five groups, the members of each group being co-extensive in the localities given, as follows:

I. *B. borealis*, *B. ternarius*, *B. huntii*, *P. suckleyi*. II. *B. occidentalis*, *B. terricola*, *B. bifarius*, *B. californicus*, *P. ashtoni*. III. *B. vagans*, *P. insularis*. IV. *B. kirbyellus*, *B. melanopygus*, *B. sylvicola*, *B. centralis*, *B. mixtus*, *P. fernaldae*. V. *B. strenuus*.

Notes on Tree and Shrub Insects in Southeastern Pennsylvania.

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The juniper webworm, *Dichomeris marginellus* Fab., is common on Irish and Swedish junipers in southeastern Pennsylvania. A few moths, many pupae and a few caterpillars were observed June 3, 1925. Moths and pupae were observed June 29, 1925, and moths and parasites were observed July 7, 1924. Pupae were observed May 18, 1925, by Mr. Floyd Smith. Small larvae in hibernating webs have been observed during September, October, November, December and January. Dusting and spraying with arsenates in April gave a slow but finally fairly complete killing of the larvae.

Moths of the arborvitae leaf miner, *Argyresthia thuicella* Packard, were observed flying from the first of June to the 15th of July though very few were seen after the middle of June. Caterpillars in mines were observed this fall.

Moths of the common bagworm, *Thyridopteryx ephemeraeformis* Haw., were observed September 8, 1925.

Moths of the white pine tube builder, *Eulia pinatubana* Kearf., were observed April 15 and July 15, 1925, there being two broods, the caterpillars of the second brood hibernating in the tubes made of webbed needles.

Moths of the larch case bearer, *Coleophora laricella* Hubner, were observed May 21, 1925.

Caterpillars were collected July 8, webbing the terminal leaves of larch twigs together and feeding on them. Moths emerged August 5, 1925, but were destroyed by dermestids before they could be identified. They were probably of the genus *Recurvaria*, two species of which have been recorded as feeding on larch.

Moths of the lilac borer, *Podosesia syringae* Harris, were observed flying the first week in June.

Moths of the Rhododendron clearwing, *Aegeria rhododendri* Beutm., were observed from June 9 to June 18, 1925.

Moths of the peach borer, *Aegeria exitiosa* Say, were observed July 27, July 30 and August 3, 1925.

Dried up unopened peony buds were observed late in August and it was noticed that they were infested with small dark caterpillars. These were reared and found to be larvae of *Moodna ostrinella* Clemens. The moths emerged September 5th and later and some of the caterpillars had not yet pupated in January, 1926. This peony budworm seems to be widely distributed around Philadelphia.

Junipers of the prostrate variety of the species *communis* have usually been found infested with a distorting mite, *Eriophyes quadrisetus juniperinus* Nalepa, which causes a warping of the needles and often kills twigs.

The roots of recently killed pines and spruces have been found infested with the grubs of the white pine weevil, *Pissodes strobi* Peck, and of Pales weevil, *Hylobius pales* Boh. There is no external evidence of the presence of the grubs in the bark and sapwood of the roots except the death of the plants. The gnawing of the bark of the branches by the adult weevils is very noticeable. Adults have been beaten from infested trees in April, May, July and September.

Adults of the European sawfly, *Acantholyda erythrocephala* Linn., were beaten from Pine and *Cornus* at Chestnut Hill in May. This insect has not been recorded from the United States before.

Adults of the European birch sawfly leaf miner, *Fenusa pumila* Klug, were observed August 4th and a new generation

of adults appeared, from leaves collected August 7th, on the 5th of September.

Adults of the *Crataegus* sawfly leaf miner were observed swarming, mating and laying eggs on the 4th of May and full grown larvae were beginning to drop from the leaves June 1, 1925. This sawfly was *Profenusa collaris* MacGill.

A gall-forming maple borer was observed emerging on July 3, 1925. These borers, *Xylotrechus aceris* Fisher, were found in 125 trees of 221 red maples in one nursery.

An oak borer, *Arhopalus fulminans* Fab., was found killing large black oak trees in a woods near Paoli. An adult was captured July 23, 1925.

The linden borer, *Saperda vestita* Say, was observed emerging the 1st of May and later.

An adult long-horn, *Cyrtophorus verrucosus* Oliv., was taken on linden April 22, 1925.

Cornus gall-midges, *Cccidomyia* spp., were observed May 11, 1925.

The rose stem girdler, *Agrilus viridis* var. *fagi* Ratz., was observed June 2, 1924 and an unemerged adult was cut from a rose stem April 13, 1925.

The round headed apple tree borer, *Saperda candida* Fab., was observed on *Crataegus* leaves May 28, 1925.

Bark borers, *Ips* and *Tomicus* spp., were destructive to pines during the summer drought.

Adults of the mottled willow borer, *Cryptorhynchus lapathi* Linn., were observed July 24 and 28, 1925, and September 5 and October 16, 1924.

The dogwood sawfly, *Macremphytus versicolor* Norton, was abundant in 1925. The partly rotten base of a flowering dogwood was observed honeycombed by the larvae of this sawfly after their last molt seeking a place to pupate the last week in August. Red-twigged and other dogwoods were partially defoliated in July and August.

Adults of the box psylla, *Psylla buxi*, were observed in June, August and September, 1925.

Adults of the box leaf miner, *Monarthropalpus buxi* Labou.

were observed from May 7 till June 1, 1925 and the first week in June, 1924.

Oystershell scale crawlers were observed May 28, June 11 and 26, and August 13 and 27, 1924, and May 6 and 18, June 2, July 20, 24, 27 and 28, and August 3 and 12, 1925.

Pine needle scale crawlers were observed May 26 and August 13, 1924, and May 18, July 20 and July 28, 1925.

Scurfy scale crawlers were observed May 18, and July 27 and 29, 1925.

Euonymus scale crawlers were observed June 11, 19 and 26, and August 27, 1924, and May 18 and 26, June 2, July 27, and August 10, 1925.

San Jose scale crawlers were observed June 26, August 13, and October 14, 1924, and June 19, July 16, 27 and 30, and August 3, 12 and 27, 1925.

Juniper scale crawlers were observed June 29, 1924, and June 2, 10 and 23, 1925.

Tulip tree scale crawlers were observed June 9, 1924, and October 6, 1924.

European elm scale crawlers were observed July 27, 1925.

Galls of the Sitka spruce gall aphid on Colorado blue spruce opened the first half of July, 1925.

Large larvae and new cocoons of the European pine sawfly, *Diprion simile* Hartig, were observed June, 1925. Over-wintering cocoons were collected this fall.

August 26, 1925, European pine shoot moth larvae in buds.

September 9, 1925, a large sour gum, *Nyssa sylvatica*, was seen about a mile west of Oakmont, in Delaware County, the leaves of which were heavily infested with the larvae of the sour gum case cutter or leaf miner, *Antispila nyssaefoliella* Clemens, and the larvae had already begun to cut out oval cases from the leaves. The larvae of this moth have destroyed the beauty of this fine tree for many years according to its owner. Abundant work of these caterpillars was observed in the woods between Bryn Athyn and Willow Grove this fall. According to Dr. E. P. Felt, the larvae begin linear mines in July and expand them to blotch mines later.

Adults of a holly leaf miner, *Phytomyza* spp., were beaten from holly at Chestnut Hill, May 11, 1925.

Adults of *Elaphidion mucronatum* Say were taken on black oak at Berwyn, June 26, 1925. This beetle was suspected of being partly responsible for the death of a number of recently transplanted trees which were also infested with flat headed borers and fungi.

An adult female of *Purpuricenus humeralis* Fab. was taken on *Juglans sieboldiana* Maxim. near the Goshen Church, east of West Chester, August 12, 1925.

Thanks are due to Dr. E. P. Felt, Prof. H. E. Hodgkiss, Mr. Floyd Smith, with whom some of these observations were made and who sent a number of specimens to Washington for identification, and to the American Entomological Society, the collections of which were consulted for identification of specimens.

Capsus externus Herrich-Schaeffer is a Paracalocoris (Hemiptera, Miridae).*

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No doubt most workers will agree that the recognition of a long lost species of an early entomologist gives much more satisfaction than the finding of a new or unnamed species. The present writer finds this to be particularly true of the species which forms the subject of this paper.

Some time ago Dr. H. M. Parshley sent me some interesting Miridae collected in Florida by Mr. C. W. Johnson. Among these I have recognized a species that I feel sure must be *Capsus externus* Herrich-Schaeffer, described in 1848 (*Wanzenartigen Insecten*, viii, p. 16, fig. 791) with locality given as "Wohl aus Nordamerika." In 1916 Mr. W. L. McAtee published a revision of the genus *Paracalocoris* Distant (*Ann. Ent. Soc. Am.*, ix, pp. 366-390), with keys to the species and varieties which has proved a most useful contribution. It is interesting to note that *Capsus externus* H. S. was not

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